



United States Department of the Interior Fish and Wildlife Service Leavenworth National Fish Hatchery Complex Entiat, Leavenworth and Winthrop Salmon Hatcheries 12790 Fish Hatchery Road Leavenworth, WA 98826 Phone: (500) 548-7641

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October 24, 2011

Lindsay Guzzo
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Environmental Protection Agency
Office of Water and Watersheds
1200 Sixth Ave
NPDES Permits Unit OWW-130
Seattle, WA 98101

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Email: guzzo.lindsay@epa.gov



RE: National Pollutant Discharge Elimination System (NPDES) Permit - Updated Information for Leavenworth National Fish Hatchery

Mrs. Guzzo,

Leavenworth National Fish Hatchery (LNFH) has made significant changes to its operations since the 2005 submittal for a NPDES permit. These changes include but are not limited to a reduction in production from 1.625 million to 1.2 million spring Chinook salmon; the use of a low phosphorus feed during the critical months of March, April, July, August, and September with the exception of fry in the nursery building; and the construction and operation of a second pollution abatement pond. These changes in operations were initiated to improve the health of the hatchery's spring Chinook salmon and to improve the quality of water (lower phosphorus) discharged into Icicle Creek. Also, in 2011 through the endangered species consultation process with the U.S. Fish and Wildlife Service, LNFH further outlined and detailed all hatchery operation and maintenance activities. Since 2005, LNFH personnel have supplied this information to the Environmental Protection Agency (EPA) to update its current NPDES permit application. In recent discussions with EPA and WA Department of Ecology staff, it became clear that LNFH needed to resubmit a NPDES permit application to ensure that EPA receives all necessary information and to eliminate confusion.

Enclosed is an updated Form 1: General Information, Form 2B NPDES application for a permit to discharge wastewater from an aquatic animal production facility, a Continuation Sheet for Form 2B, and the March 2011 Biological Assessment for the Leavenworth National Fish Hatchery.

If further information is required please contact Malenna Cappellini the Leavenworth Fisheries Complex's Environmental Compliance Biologist at (509) 548-2928 or malenna cappellini@fws.gov.

Sincerely,

Al Jensen,

Leavenworth NFH Manager

	ype in the unshad						Fopproved. OMB No. 2040-0	086.		
FORM						ION AGENCY	I. EPA I.D. NUMBER			
1	\$EPA	GENERAL INFORMATION Consolidated Permits Program F						T/A C		
GENERAL		(Read the "General Instructions" before starting.)					13	14 15		
LARCI	ITEMS						GENERAL INSTRU	CTION		14 15
LABEL	LITEMS						If a preprinted label has been			
designated space. Review the inform I. EPA I.D. NUMBER designated space. Review the inform is incorrect, cross through it and en								ter the	correct	data in the
appropriate fill-in area below. Also, if any is absent (the area to the left of the										
III. FACILITY	NAME	PLEASE	PLA	CE LA	BEL IN THI	S SPACE	information that should appear), plea	se prov	vide it in	the proper
V. FACILITY	MAILING						fill-in area(s) below. If the label is oneed not complete Items I, III, V, a			
ADDRES							must be completed regardless). Cor has been provided. Refer to the ins	nplete a	all items	s if no label
VI. FACILITY	/ LOCATION						descriptions and for the legal author	rization	s unde	which this
							data is collected.			
II. POLLUTANT	CHARACTERIST	TICS	E 118							
submit this form you answer "no	m and the suppler o" to each question	mental form listed in the pare	nthesi f these	s follo	wing the qu s. You may	estion. Mark "X" in the box in answer "no" if your activity is	the EPA. If you answer "yes" to ar the third column if the supplemer excluded from permit requirement	ntal for	m is a	ttached. If
				Mari	k "X"				Mark	.X.
	SPECIFIC QU	ESTIONS	YES	NO	FORM ATTACHED	SPECIFIC	CQUESTIONS	YES	NO	FORM ATTACHED
A Is this facilit	v a publicly own	ned treatment works which	<u> </u>		ATTACTICE	B Does or will this facilit	y (either existing or proposed)			ATTACHED
		ers of the U.S.? (FORM 2A)		X		include a concentrated	animal feeding operation or	X		\times
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			16	17	18	discharge to waters of t		19	20	21
		tly results in discharges to n those described in A or B		X			(other than those described in A		V	
above? (FO		ii alose described III A Of B				the U.S.? (FORM 2D)	or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)			
		reat, store, or dispose of	22	23	24		ect at this facility industrial or	25	26	27
	wastes? (FORM			X			ect at this facility industrial or		V	
		•		/ \		containing, within one	quarter mile of the well bore,			
			28	29	30	underground sources of o	drinking water? (FORM 4)	31	32	33
		s facility any produced water					t at this facility fluids for special			
		brought to the surface in oil or natural gas production,	1	X			g of sulfur by the Frasch process,			
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gas, or inje		ge of liquid hydrocarbons?				lusi, si issersi, si gsalli	omai onoigy : (i oran i)			
(FORM 4)		500	34	35	36			37	38	39
		ionary source which is one					ed stationary source which is			
		listed in the instructions and tons per year of any air		IX		NOT one of the 28 in	dustrial categories listed in the vill potentially emit 250 tons per		X	
		Clean Air Act and may affect				year of any air pollutant i	regulated under the Clean Air Act		' \	
or be located in an attainment area? (FORM 5) 40 41 42 and may affect or be located in an attainment area?						43	44	45		
						(FORM 5)				
III. NAME OF	FACILITY	Fig. 18 Sept. 18 Sept. 18								9244
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		A. NAME & TITLE (last	t, first,	& title,)		B. PHONE (area code & no.)		-	
Jensen	Al, Hatc	hery Manager	1 1	1 1	1 1 1	1111111	(509) 548-2917	1		
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с				ТТ	TTT					
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VI. FACILITY	LOCATION									
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	Fish Hatc	пету коас								
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		B. COUNTY	NAN	IE ,						
Chelan	1 1 1		1 1	1	1 1					
46							70			
		C. CITY OR TOWN				D. STATE	E. ZIP CODE F. COUNTY C	ODE (if know	n)
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VII. SIC CODES (4-digit, in order of priority)	D OFFICE AND A STATE OF THE STA	
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15 16 - 19 C. THIRD	D. FOURTH	
c (specify)	C (specify)	
7 15 16 - 19	15 16 - 19	
VIII. OPERATOR INFORMATION	15 10 - 19	A
A. NAME	B. Is the name listed in Item	n
8 U.S. Fish and Wildlife Service, Leavenworth	h Fisheries Complex ZYES NO	
15 16	55 65	
C. STATUS OF OPERATOR (Enter the appropriate letter into the		
M = P[IR][C] (other than federal or state) D	specify)	
P = PRIVATE O = OTHER (specify)	20 CONTROL OF THE CON	
56	15 8 - 18 19 - 21 22 -	26
E. STREET OR P.O. BOX		
12790 Fish Hatchery Road		
26	55	
F. CITY OR TOWN	G. STATE H. ZIP CODE IX. INDIAN LAND	
B Leavenworth	WA 98826 ☐ YES ☑ NO	is?
B Leavenworth	40 41 42 47 - 51 52 ZINO	
X. EXISTING ENVIRONMENTAL PERMITS		
	missions from Proposed Sources)	
9 N WA-000190-2 9 P		
15 16 17 18 30 15 16 17 18	30 E. OTHER (specify)	- 6
B. UIC (Underground Injection of Fluids)	(specify)	
9 U 9	15 50	
15 16 17 18 30 15 16 17 18	30 E. OTHER (specify)	
C. RCRA (Hazardous Wastes)	(specify)	
9 R 9 1	17-327	
15 16 17 18 30 15 16 17 18	30	and the same
XI. MAP		
Attach to this application a topographic map of the area extending to at least one	e mile beyond property boundaries. The map must show the outline of the facility, n of its hazardous waste treatment, storage, or disposal facilities, and each well when	the
injects fluids underground. Include all springs, rivers, and other surface water bodies	s in the map area. See instructions for precise requirements.	
XII. NATURE OF BUSINESS (provide a brief description)		
Currently, LNFH targets a release of 1.2 million spring	G Chinook salmon pre-smolts into Icicle Creek (approx.	rm
2.7) during late April. Also, LNFH supports the Yakama	Nation's Coho Reintroduction Project by providing	
hatchery facilities for part of its expanded coho salmo are released into Icicle Creek. For further details on	hatchery production see Attachment A (Biological	OII
Assessment for the Operation and Maintenance of Leavenw	worth National Fish Hatchery, March 2011).	
XIII. CERTIFICATION (see instructions)	AND THE PROPERTY OF THE PROPERTY OF THE PARTY OF THE PART	Cale
I certify under penalty of law that I have personally examined and am familiar with	the information submitted in this application and all attachments and that, based on tained in the application, I believe that the information is true, accurate, and comple	n my
am aware that there are significant penalties for submitting false information, including	ling the possibility of fine and imprisonment.	
A. NAME & OFFICIAL TITLE (type or print) B. SIGNATURE	C. DATE SIGNED	
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Allen lensen, Hatchy many (1	10/24/11	
COMMENTS FOR OFFICIAL USE ONLY		
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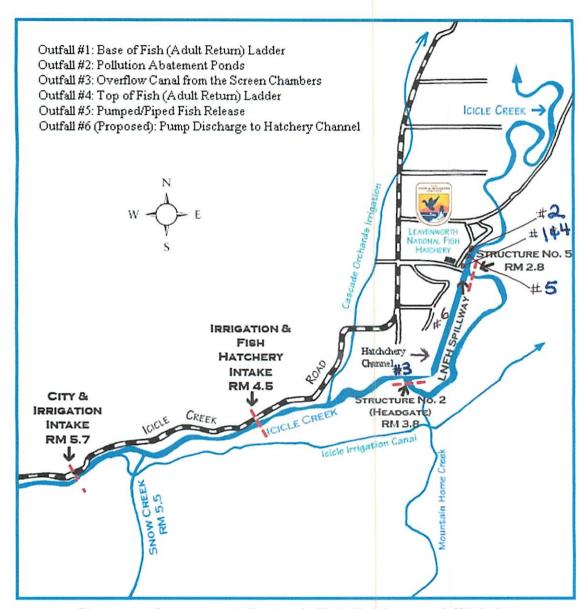
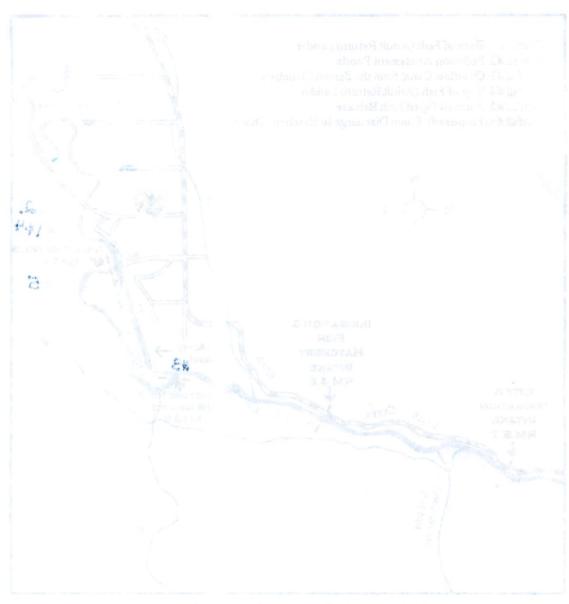


Figure 1. Leavenworth National Fish Hatchery and Vicinity



Transa 1. Leave twom it Nec tough Farm

Form 1. XI. Map(2) L

Map of Leavenworth, WA

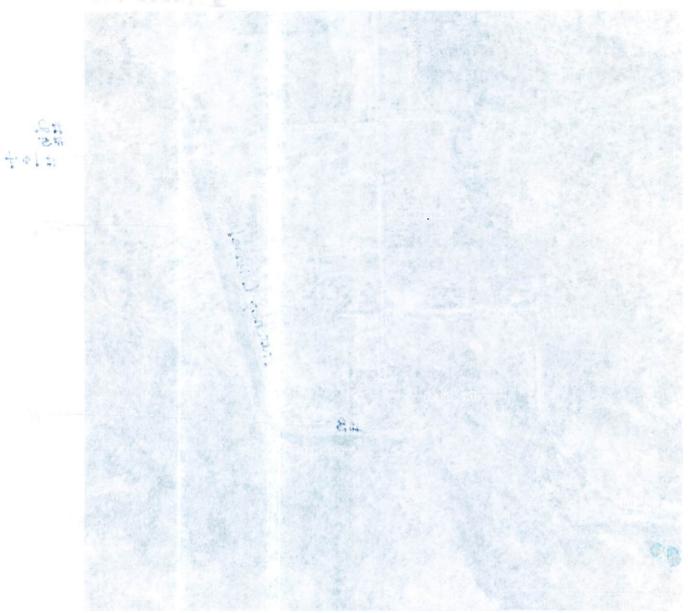




When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.



May of Leavenworth, WA



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EPA I.D. NUMBER (copy from Item 1 of Form 1)

FORM 2B NPDES	EPA CON	CENTRATE	U.S. ENV APPLICATIONS D ANIMAL FEEDING	FOR P	ERMIT TO		E WASTE	WATER	TION FACILITIES
I. GENERAL INFORM	ATION	Applying f	or: Individual Permi	t 🗆	C	overage Unde	er Genera	l Permit 🗆	
A. TYPE OF BU	B. CONTACT INFORMATION						C. FACILITY OPERATION STATUS		
 □ 1. Concentrated Anin Operation (comple and section II) ☑ 2. Concentrated Aqua Production Facility B, C, and section I 	Owner/or Operator Name: Al Jensen, Hatchery Manager Telephone: (509) 548-2917 Address: 12790 Fish Hatchery Road Facsimile: (509) 548-3401 City: Leavenworth State: Wa Zip Code: 98826					☑ 1. Existir	-		
Address: 12790 Fish Ha City: Leavenworth County: Chelan If contract operation:	worth National Fish atchery Road Stat Stat	e: WA Latitude:	Telephone: (509) 548-7641 Facsimile: (509) 548-3401 /A Zip Code: 98826 rude: S26 T24N R17E Longitude:						
II. CONCENTRATED	ANIMAL FEEDIN	NG OPERA	ATION CHARACT	_					
A. TYPE AND NUMBE	R OF ANIMALS					E, LITTER, A TION AND I		WASTEWA	TER
1. TYPE NO. IN OPEN CONFINEMEN Mature Dairy Cows Dairy Heifers		N OPEN	DPEN NO. HOUSED unnually by the facility? 2. If land applied how many the applicant are available manure/litter/wastewater 3. How many tons of manuwater produced by the Care		y? any acres able for a ater? anure or li	and wastewater is generated gallons gallons acres of land under the control of e for applying the CAFOs acres re or litter, or gallons of waste-AFO will be transferred annually			
☐ Veal Calves					to other p	ersons?	ton	ns	_gallons
☐ Cattle (not dairy or vecalves)	eal								
☐ Swine (55 lbs. or ove	r)								
☐ Swine (under 55 lbs.)									
☐ Horses									
☐ Sheep or Lambs									
□ Turkeys									
☐ Chickens (Broilers)									
☐ Chickens (Layers)									
□ Ducks									
☐ Other: Specify									
3. TOTAL ANIMALS									

Form Approved OMB No. 2040-0250

C. TOPOGRAPHIC MAP							
D. TYPE OF CONTAINMENT, STORAGE AND CAPACITY							
1. Type of Containment Total Capacity (in gallons)							
☐ Lagoon							
☐ Holding Pond							
☐ Evaporation Pond							
Other: Specify							
2. Report the total number of acres contributing of	Irainage:	acres					
3. Type of Storage	Total Number of Days	Total Capacity (gallons/tons)					
☐ Anaerobic Lagoon							
☐ Storage Lagoon							
☐ Evaporation Pond							
☐ Aboveground Storage Tanks							
☐ Belowground Storage Tanks							
□ Roofed Storage Shed							
☐ Concrete Pad							
☐ Impervious Soil Pad							
☐ Other: Specify							
E. NUTRIENT MANAGEMENT PLAN Note: Effective February 27, 2009, a permit application is not complete until a nutrient management plan is submitted to the Permitting Authority. 1. Please indicate whether a nutrient management plan has been included with this permit application.							
5. If not land applying, describe alternative use(s) of manure, litter, and/or wastewater:							
F. LAND APPLICATION BEST MANAGEMENT PRACTICES Please check any of the following best management practices that are being implemented at the facility to control runoff and protect water quality: Buffers Setbacks Conservation tillage Constructed wetlands Infiltration field Grass filter Terrace							

III. CONCENT	RATED AQUA	TIC ANIMAL PR	ODUCTION FA	CILITY CHARA	CTERIST	TCS			
A. For each outfa flow, and the l	B. Indicate the total number of ponds, raceways, and similar structures in your facility.								
1. Outfall No.	o. 2. Flow (gallons per day)			1. Ponds	2.	Raceways	3. Ot	her	
See Attached Continua -tion Sheet for III. A, B, & C	a. Maximum. Daily				Provide the name of the receiving water and the source of water a by your facility.			ource of water	
		tic animals held an veight, and also giv			es, give the			your facility per	
	1. Cold W	ater Species			2. V	Warm Water Speci	ies		
a. Spe	ecies	b. Harvestable We	eight (pounds)	a. Sp	a. Species		b. Harvestable Weight (pounds)		
		(1) Total Yearly	(2) Maximum			(1) Total	Yearly	(2) Maximum	
Spring Chi salmon Coho salm		75,000 10,000	80,000 33,000	N/A					
E. Report the total		d during the calenda	ar month of	1. Month April		2. Pound: 14,000	s of Foo	i	
IV. CERTIFICA	ATION				Į.				
attachments and	that, based on m ue accurate and	I have personally of those is complete. I am awa ent.	ndividuals immedi	iately responsible	for obtaini	ng the information	, I believ	ve that the	
A. Name and Official Title (print or type) B. Telephone (509						none (548-291	7	
C. Signature	Al Jensen, LNFH Manager C. Signature D. Date Signed 10/24/11								

CONTINUATION SHEET from EPA FORM 3510-2B (Rev. 11-08)

A.

1. OUTFALL No. (see	2. FLOW (gallons per	day)	
operational description below)	a. Maximum Daily	b. Maximum 30 Day	c. Long Term Average
1	32,800,000	984,000,000	26,000,000
2	8,640,000	259,200,000	288,000
3	0	0	0
4	5,760,000	172,800,000	5,040,000
5	72,000	1,008,000	72,000
6 - Proposed	unknown	unknown	unknown

Outfall #1: Base of Fish (Adult Return) Ladder

The majority of river and well water used for hatchery operations returns to Icicle Creek from Outfall #1 near the base of the adult return ladder (~ rm 2.8) except during rearing unit cleaning and maintenance activities when all water is routed through the pollution abatement ponds. All river water and groundwater used at the hatchery, minus any leakage and evaporation, is returned to Icicle Creek (non-consumptive use).

Outfall #2: Pollution Abatement Ponds

As of 2011, Leavenworth NFH has a second functional pollution abatement pond. When online, both pollution abatement ponds discharge into Icicle Creek at Outfall #2 (~rm 2.7). Outfall #2 is used during rearing unit cleaning and maintenance activities.

Outfall #3: Overflow Canal from the Screen Chambers

Currently, Outfall #3 (~rm 3.8) is not used as a discharge point by the hatchery. However, the hatchery wishes to retain this discharge point for potential future use. In the past, Outfall #3 was operated intermittently as a fish return bypass for the hatchery's water delivery system.

Outfall #4: Top of Fish (Adult Return) Ladder

In the past, Outfall #4 was used for 1 to 2 weeks a year in late April to release hatchery presmolts into Icicle Creek (~rm 2.8). Currently, pre-smolts are pumped from rearing units through an above ground pipeline into Icicle Creek at approximately rm 2.75 (Outfall #5). However, the hatchery wishes to retain Outfall #4 for emergency releases and potential future use. When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #4.

Outfall #5: Pumped/Piped Fish Release

Outfall #5 is currently used for 1 to 2 weeks a year in late April to release hatchery pre-smolts which are pumped from rearing units through an above ground pipeline into Icicle Creek (~ rm 2.75). When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #5.

CONTINUATION SHEET from EPA FORM 3510-2B (Rev. 11-08) page 2

Outfall #6 (Proposed): Pump Discharge to Hatchery Channel

Leavenworth NFH is proposing to pump a portion of discharge water destined for Outfall #1 upstream to a new discharge point (Outfall #6) in the Hatchery Channel section (rm 2.8 to 3.8) of Icicle Creek. The details of where, when, and how much discharge will be released at proposed Outfall #6 are currently being determined by Leavenworth NFH. The hatchery will provide this information to EPA within the next 6 months.

- B. Rearing and holding units currently in operation at Leavenworth NFH include:
 - 2, 15' x 150' adult holding raceways
 - 45, 8' x 80' raceways
 - 14, 10' x 100' covered raceways
 - 122 fiberglass tanks
 - 16 of 40 small Foster-Lucas rearing units
 - 2 of 22 large Foster-Lucas rearing units
- C.1. Icicle Creek is the receiving water body.
- C.2. Leavenworth NFH's water sources include Icicle Creek, Snow/Nada Lake Basin, and 7 wells. The hatchery's water rights include:

CERTIFICATE#	PRIORITY DATE	SOURCE	AMOUNT
1824	03/26/1942	Icicle Creek	42 cfs (18,851 gpm)
1825	03/26/1942	Snow & Nada Lakes	16,000 acre feet
016378	08/01/1939	Groundwater (1 Wells)	1.56 cfs (700 gpm)
016379	06/01/1940	Groundwater (1 Wells)	2.01 cfs (900 gpm)
3103-A	10/16/1957	Groundwater (1 Wells)	2.67 cfs (1200 gpm)
G4-27115C	10/20/1980	Groundwater (4 Wells)	8.69 cfs (3900 gpm)